MAIS Significant and Critical Change Processes

5 Aug 08

Overview

- **Outlines the draft processes for MAIS Significant and Critical Changes to meet Title 10, Chapter 144A**
- **These processes were developed in coordination with OSD and the Services using Nunn-McCurdy lessons learned yet tailored for a flexible MAIS approach**

Outline

- **FY07 NDAA Title 10, Chapter 144A Overview**
- **Program Evaluation and Critical Change Report**
- **Processes and team membership**
- **Current Estimate and Open Issues**

FY07 NDAA (Title 10, Chapter 144A)

- **Formalizes MAIS thresholds in statute – Taken from DODI 5000.2**
- **Establishes MAIS annual and quarterly reporting**
  - **MAIS Programs are baselined with their first annual submission (after Milestone B) and tracked against them quarterly**
    - **Schedules including Milestones A, B, C, FDDR, IOC, and FOC**
    - **Cost estimates of both development and full life-cycle costs**
    - **KPPs**
    - **Baseline cannot be changed until Critical Change reported**
  - **Annual reports to Congress, Quarterly reports to "Senior Official"**
- **Sets thresholds and reporting for Significant and Critical Changes**
  - **Significant: Senior Official must notify Congress within 45 days**
    - **Similar to Program Deviation Report (PDR)**
  - **Critical: Conduct a program evaluation and report to Congress within 60 days**
    - **Otherwise cannot obligate funds**
    - **Can resume obligating funds once report is submitted to Congress**

Title X, Chapter 144A

MAIS Annual / Quarterly Reports

- **MAIS Annual Reports (MARs)**
  - Provides cost/schedule/KPP baseline and current estimate
  - Submitted to Congress NLT 45 days after PB submitted
  - Initial submission serves as baseline – even if APB changes
  - OASD(NII) processes on behalf of SecDef (18 Jul 07 delegation)

- **MAIS Quarterly Reports (MQRs)**
  - Provides cost/schedule/KPP baseline and current estimate
  - Tailored MAR, submitted to Senior Official (different from DAES report)
    - Copies sent to OASD(NII) for compliance tracking
  - May eventually be integrated in DAMIR DAES
  - Program status section can discuss cost/schedule slip trends

MAIS Change Summary

Per Title 10, Chapter 144A

	Significant	Critical
Cost **Program development or full life-cycle cost**	**15-25% increase**	**≥ 25% increase**
Schedule	**>6 month – 1 year delay**	**≥ 1 year delay**
Time Certain Development		**Fail to achieve IOC within 5 yrs of MS A**
Performance	**"Significant adverse change in expected performance"**	**"Undermine the ability of the system to perform mission as originally intended" (Miss KPP)**
Report to	**Notification NLT 45**	**and Report NLT 60**

Schedule Breach Most Likely – MS C, FDDR, IOC, and FOC

MAIS "Senior Officials"
Per Title 10, Chapter 144A

- **SAE: An AIS to be acquired for a military department**
- **USD(AT&L): AIS acquired by a component other than military dept and MDA has been retained by AT&L**
- **ASD/NII: Any other AIS to be acquired for DOD or any component (Delegated from AT&L 18 Jul 07)**

- **Critical change reports are submitted through SecDef to Congressional defense committees**

Services Will Oversee their Critical Change Effort for MAIS and Invite OSD Staff Participation to Streamline OSD Coordination

Significant Change

- **MAIS Quarterly Report informs Senior Official of change**
- **Significant Change Report is a 1-2 page memo from Senior Official to Congress, similar to Program Deviation Report (PDR)**
  - **Identify significant change and reason for it**
  - **Identify corrective actions that need to be taken to bring program back within baseline parameters or avoid further deviation from baseline**
- **Projected new cost or schedule if known**
- **Drafted by PM, coord with PEO staff and SAE/CAE staff**
- **Coordinated with OSD before sending to Congress (Timeline?)**
- **We need to develop template and folder of sample letters**

NII Quarterly
ort Memo 22 Apr

Critical Change Program Evaluation

- **E1. Projected cost and schedule for completing the program if current requirements are not modified**
- **E2. Projected cost and schedule for completing the program based on reasonable modification of such requirements**
- **E3. ROM of the cost and schedule for any reasonable alternative system/capability**

Areas of Evaluation Feed The 4 Areas of the Critical Change Repo

Critical Change Report

- **R1. AIS to be acquired under the program is <u>essential to national security</u> or to the efficient management of the DoD**
- **R2. <u>No alternative</u> to the system will provide equal/ greater capability at less cost**
- **R3. <u>New estimates</u> of cost, schedule, and performance parameters with respect to the program and system <u>are reasonable</u>**
- **R4. <u>Management structure</u> for the program is adequate to manage and control costs**

Critical Change Report: 2 Page Intro, 1 Page For Each Of 4 Areas

Rules of Engagement

- **Provide best effort within 60 days – Due diligence**
  - **Otherwise programs cannot obligate funds**
  - **Nunn-McCurdy certification process can take 9+ months**
  - **Provide good faith effort to meet intent of law**

- **Notify Senior Official informally of change ASAP – No surprises**
  - **Formal notification via MAIS Quarterly Report starts 60 day clock**
  - **Before declaring a sign/critical change, need independent analysis**
  - **CAE could disagree that a critical change occurred**

- **Get all interested parties involved EARLY and OFTEN**
  - **Kickoff meeting with Critical Change Team lead ASAP**

Critical Change Process Becomes The #1 Priority For Program

Critical Change Team (CCT)

- **CCT Sponsor: SES level provided by Component**
  - **SAE/CAE senior advisor providing direction to CCT**
- **CCT Lead: O-5/O-6/Civ provided by Component**
  - **The primary focal point to lead evaluation team and generate report**
- **Team Membership**
  - **Program Office – Program Manager and Financial Manager**
  - **Program's Pentagon Representatives (PEMs)**
  - **SAE staff for budgeting, costing, acquisition strategy, and reporting**
  - **PEO Staff**
  - **User representatives**
  - **OSD Staff will be invited to participate on teams and reviews**
- **Senior Review Team: SAE/CAE and senior Component staff provide final review of report**

am Should Have Roles Clearly ID – Avoid Growing Into Bureaucra

Program Evaluation (E1)

- **Projected cost and schedule for completing the program if current <u>requirements are not modified</u>**
- **Team members:**
  - **Component & program office cost estimators, PM, CAE and PEO Staff, OSD (PSA, PA&E, Acquisition Analyst)**
- **Focus:**
  - **Update cost estimate, IMS, and Milestone Schedule**
  - **Review EVM data – Discuss with contractor**
  - **Summarize acquisition and total life cycle cost growth from the baselined MAIS Annual Report (MAR)**
    - **Display changes in constant (BY) and current (TY) dollars**
    - **Include rationale for growth such as changes in: inflation, requirements, escalation outlay, quantity, schedule, budget, estimating, technical uncertainties/corrections, or other errors**

eport w/Critical Change Has Independent Cost/Schedule Estimat

Program Evaluation (E2)

- **Projected cost and schedule for completing the program based on reasonable modification of such requirements**
- **Team members:**
  - **Component Ops Staff, User Reps, Component & program office cost estimators, PM, CAE and PEO Staff, OSD (PSA, CJS/J8, PA&E, Acquisition Analyst)**
- **Focus:**
  - **Identify requirements modification**
  - **Update existing cost estimates**
  - **Update IMS and Milestone Schedule**
  - **Review EVM data – Discuss with contractor**
  - **Not meeting a KPP – Unlikely**

Program Evaluation (E3)

- **ROM of the cost and schedule for <u>any reasonable alternative</u> system/capability**
- **Team members:**
  - **Component Ops Staff, User Reps, Component & program office cost estimators, PM, CAE and PEO Staff, OSD (PSA, CJS/J8, PA&E, Acquisition Analyst)**
- **Focus:**
  - **Identify any alternative systems**
  - **Develop ROM**
  - **Develop Milestone Schedule**
  - **Do not re-accomplish AOA, yet reference any existing AoAs and discuss any major deviations from past analysis**

Critical Change Report (R1)

- **AIS to be acquired under the program is essential to national security or to the efficient management of the DoD**
- **Team members:**
  - **Component Ops and CAE Staff, User Reps, PM, OSD (PSA, CJS/J8, Acquisition Analyst)**
- **Focus:**
  - **Small team author a few paragraphs on program need**
  - **Include threat, mission, and current systems available to meet the threat or efficient management need**
  - **Include references to relevant CONOPS, Strategic Policy Guidance, Roadmaps, ICD, CDDs, Threat Assessments, National Security Strategy, National Military Strategy, QDR, COCOM IPLs, AF Strategic Roadmap, etc.**

Critical Change Report (R2)

- **No alternative to the system will provide equal/greater capability at less cost**
- **Team members:**
  - **Component Ops Staff, User Reps, Component & program office cost estimators, PM, CAE and PEO Staff, OSD (PSA, PA&E, Acquisition Analyst)**
- **Focus:**
  - **Document findings from Program Evaluation (E3)**

Critical Change Report (R3)

- **New estimates of cost, schedule, and performance parameters with respect to the program and system are reasonable**
- **Team members:**
  - **Component Ops Staff, User Reps, Component & program office cost estimators, PM, CAE and PEO Staff, OSD (PSA, PA&E, Acquisition Analyst)**
- **Focus:**
  - **Document findings from Program Evaluation (E1) and (E2)**
  - **Based on decision to keep baseline or modify requirements**

Critical Change Report (R4)

- **Management structure for the program is adequate to manage and control costs**
- **Team members:**
  - **CAE and PEO Staff, PM, OSD (AT&L (SSE and DPAP), DCIO, Acquisition Analyst)**
- **Focus:**
  - **Review SPO and Contractor management structure**
  - **Questions outlined on following slides**
  - **Possible site visits**
  - **Develop ADM for Senior Official to direct corrective action**

Management Structure Questions

1. Describe the incentives (or disincentives) in place to motivate the Program Manager to manage cost, schedule, and performance. What mechanisms are in place to assist the Program Manager in managing cost, schedule, and performance?
2. With respect to all existing and planned major current year contract awards:
   a. Describe contract type.
   b. Identify contract incentives, especially with regard to impact on controlling costs, and identify the amount of incentive dollars the contractors have received.
   c. Discuss/summarize how the contractors' management control systems implement the Earned Value Management System (EVMS) Guidelines of ANSI/EIA 748-A-1998 (R2002).
   d. Describe type of contract cost reporting, such as Cost Performance Report, Cost/Schedule Status Report, Contracts Fund Status Report, and Contractor Cost Data Report, and frequency of each.
   e. Identify the cost control and cost reduction efforts included in the contract; for example, design to cost, and value engineering.
   f. Discuss percent of subcontract work and provisions for cost visibility with special emphasis on firm fixed-price subcontracts.
   g. For current contracts, discuss the status of definitizing total authorized work value, actual costs incurred to date, and planned but unauthorized work. Explain any delays in definitizing contracts.
   h. What difference exists in the Program Manager's estimate to complete and the prime and associate contractors' estimate? Explain the differences.

Initial Set of Questions for CCT to Ask Program Office for R4

Management Structure Questions

3. Does the management information system provide adequate and timely information to the Program Manager on matters of cost, schedule, and performance? Describe briefly the system in general terms and any changes, planned or implemented as of result of the critical change.
   a. Identify procedures for using contractor cost and schedule information, including frequency of review and how data is incorporated into program estimates and the planning, programming, and budgeting system.
   b. Describe quality and usefulness of contractor cost information by contract. Discuss proposed actions to correct any problems.
   c. Discuss how the Integrated Master Schedule (IMS) tracks to the critical path.
   d. Discuss the link between IMS and the EVMS schedules, and whether the IMS accurately reflect the current program.
4. Is Program Office's staffing, co-located or off-site, sufficient to support the functional areas that are critical to a program (e.g., program management, systems engineering, developmental testing, quality assurance, financial management, contracting, logistics)?
5. What is the Contractor's Health Metric Calculation?
   a. Are there significant corporate/group issues affecting program?
   b. Is program aligned with core business of the business unit performing the contract?
   c. Is the contractor's program office properly staffed (team and key personnel)?
   d. Has contractor been executing according to program plan and execution manning levels?
   e. Are the contractor's program leadership positions stable?
   f. Have more than half of the key leaders been with the program for over a year?
   g. Are there any significant issues with contractor facilities?
   h. Does corporate management demonstrate commitment to program?

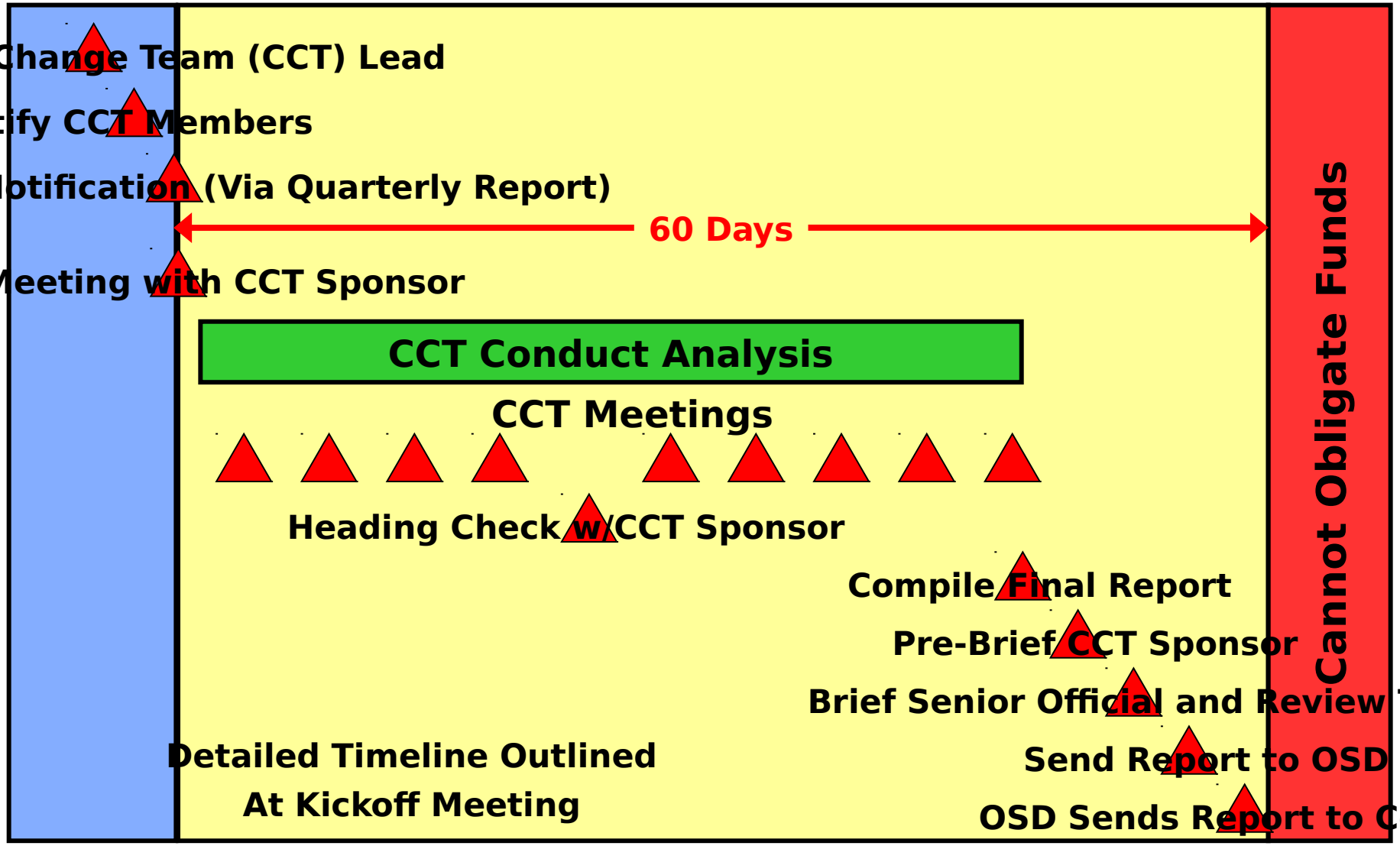
Initial Set of Questions for CCT to Ask Program Office for R4

Management Structure Questions

6. Does the Systems Integrator or Prime Contractor have effective means for controlling subcontractors, vendors, and suppliers? Describe briefly.
7. Describe the System Integrator or Prime Contractor's software development processes and configuration control procedures, and how and when the cost impact of changes is incorporated into total program cost estimates and the planning, programming, budgeting, and execution system.
8. Has requirements instability (e.g., Reports, Interfaces, Conversations, and Extensions (RICE) object design; number of users or system interfaces; or scope of effort) or funding instability been a major problem in schedule slippage or cost growth? Describe briefly. Also describe the process used to track requirements and control new requirements.
9. Have all significant technical issues been resolved? What is the current rate of closing out Software Deficiency Reports? Is the system design stable?
10. Does the acquisition strategy incorporate evolutionary acquisition, modular contracting and open architecture approaches, as appropriate? If no, what actions are being taken to implement these approaches?
11. What are the major factors that contributed to the critical change in cost, schedule, and/or performance? To what extent are these factors controlled by the Government or the Contractor?
12. Describe any changes to both the Government and contractor management structure or management control processes that were implemented or are planned in response to the Critical Change.
13. Discus whether key program documents are current and accurately reflect the program being executed (e.g., acquisition program baseline, acquisition strategy report, risk management plan, systems engineering plan, software development plan, and testing plan).

Initial Set of Questions for CCT to Ask Program Office for R4

Critical Change Process



Current Estimate

OSD's Overarching Definition

- The Program Manager's Current Estimate is the latest estimate of program acquisition cost and full life cycle cost, schedule milestone dates, and performance characteristic values of the approved program (i.e., the approved program as reflected in the currently approved APB, ADM, or in any other document containing a more current decision of the MDA or other approval authority)
- Cost: Normally the President's budget plus or minus fact of life changes
- Schedule: Normally the PM's best estimate of current schedule milestone dates
- Performance: Normally the PM's best estimate of current performance characteristic values

mponents May Clarify Current Estimate Further For Their Progra

FY09 NDAA – SASC Bill (Sec 802)

Would Make Life VERY Difficult – Not Law Yet

- **Expands MAIS Reporting to Pre-MAIS programs and programs that are expected to meet definition, yet not formally declared a MAIS yet**
  - **Pre-MS B programs don't have cost/sched/perform baseline**
- **Time Certain Development – Factor for Critical Change**
  - **Removes IOC within 5 years of MS A requirement**
  - **Adds MS B within 2 years of investment in program**
  - **Adds IOC within 3 years of MS B requirement**
- **These changes run counter to DOD policy trends and will drive most MAIS programs to either have a critical change or restructure into small increments with frequent resource and time-consuming milestones**

D/NII Appealed Language – Remove Most, Change B to IOC in 4 y

Open Issues

- **During 60 day window, are there any limitations?**
  - **Intent is to not award/obligate major contracts during “breach”**
  - **Could offer a Senior Official approval required for new contract awards**
- **Should we provide Congress a heads up for Critical Changes?**
  - **Need to develop letter template and accelerated process via LL**
- **Aligning Program Deviation Report (PDR) and MAIS Significant/Critical Change timelines/processes**
- **OSD timeframe to coordinate and transmit critical change report (5 days?) to meet 60 day requirement**
  - **OSD participation on Critical Change Team should help**
- **Evidence to Congress that Critical Change Report has gone through SecDef**
  - **AT&L or NII (as appropriate) sign transmittal of Report, which was signed by Senior Official**

Way Ahead

- **Brief process to OSD, Components, and Agencies**
  - **Goal is to have similar processes across Components, tailored for organizational differences**
  - **Formalize generic process in DAG (after coord w/stakeholders)**
- **Components/Agencies Formalize Their Processes**
  - **Meeting with all stakeholders to finalize process, issues**
  - **Agree to team membership and leadership roles**
- **Begin to Think About How We Need to Change The Way We Manage MAIS Programs**
  - **How should we structure MAIS – Shorter Increments?**
  - **How do R-Docs/J-Books map to APBs and MARs?**

Need to Establish Process BEFORE First MAIS Critical Change